

CATEGORY A

DIABETES MELLITUS AND OTHER METABOLIC CONDITIONS

1. Disturbances in function of the endocrine glands cause many symptoms from generalized asthenia, muscle weakness, and spasm or tetany to sudden episodes of dizziness or unconsciousness. Individuals so afflicted should not drive a motor vehicle until these symptoms have been controlled by appropriate therapy.
2. Problems associated with metabolic diseases such as muscular weakness, muscular pain, visual disturbances, dizziness, intractable headaches, and/or fatigue propensity should also be shown under other appropriate profile categories.
3. Since persons with metabolic disorders may be affected in very different ways, the health care professional should counsel with the patient about any special precautions, limitations or recommendations appropriate to their case. These should be reported by the health care professional.
4. **DIABETES MELLITUS:** In the past, people with diabetes have been involved in almost twice as many motor vehicle accidents as the non-diabetic driving population. Careful evaluation and medical management can increase their safety. Even people with diabetes whose disease is well controlled with insulin or oral hypoglycemic drugs may occasionally suffer a hypoglycemic episode. It is important that the health care professional ascertain the cause of these occasional episodes and change management of the patient. Before deciding the patient's condition is again stable enough for them to drive a motor vehicle, the health care professional should observe the patient under the new program to be sure that it is effective.
5. Certain insulin requiring individuals with diabetes are much more likely than average to have altered consciousness from hypoglycemic episodes. These individuals have "hypoglycemic unawareness" . . . that is, a lack of the adrenergic warning signs of nervousness and sweating which should alert the person to eat sugar and reverse the insulin reaction. The best predictor of which diabetic patient is likely to experience severe hypoglycemia is a history of a recent episode of severe hypoglycemia (under any circumstances) since recurrence of hypoglycemia and therefore reduced appreciation of the hypoglycemic condition is much more likely.
6. A typical assessment of such individuals includes a history of previous episodes of hypoglycemia induced unconsciousness, long duration diabetes and possibly autonomic neuropathy or beta blocker therapy. The health care professional should take these factors into account when determining a safety assessment level. Also, many episodes of altered consciousness (requiring the assistance of another person to reverse) are treated outside of health care facilities and may not come to the health care professional's attention. Inquiry into such events should be made.
7. It is strongly recommended that health care professionals counsel all insulin or oral antidiabetic medication-requiring individuals to store in their vehicles, at all times, a source of rapidly absorbed carbohydrate. Further, blood glucose monitoring just prior to driving should be urged for any diabetic driver with a history of limited awareness of hypoglycemia.
8. Visual acuity changes, with marked fluctuation in blood glucose concentrations, may affect driving safety. The patient with impaired vision should not drive until the blood glucose level is brought under control. Diabetic retinopathy may affect visual acuity and should be checked by the primary health care professional, ophthalmologist or optometrist and be reported under appropriate assessment categories.
9. Oral antidiabetic medications which are highly unlikely to lead to hypoglycemia (unless used in combination with insulin or sulfonylurea) include Metformin, Alpha Glucosidase inhibitors and insulin sensitizers (thiazolidinediones), GLP-1 agonists and DPP-4 inhibitors.
10. **PARATHYROID DISORDERS:** Hyperparathyroidism with muscular weakness and hypotonia is a contraindication to driving any motor vehicle, unless symptoms are mild or well controlled by therapy. Individuals suffering from acute hypoparathyroidism with increased neuromuscular excitability, cramps, spasm, and generalized tetany should not drive unless symptoms are mild.

- 11. THYROID DISORDERS:** Persons with marked hyperthyroidism may experience extreme restlessness, tremor, psychotic disturbance, agitation, insomnia and at times, impulsive behavior, which may preclude driving. Hypothyroidism often leads to somnolence and decreased alertness which may affect driving safety.
- 12. HYPOGLYCEMIA:** Individuals suffering from recurring spontaneous attacks of hypoglycemia causing faintness or unconsciousness should be carefully evaluated and treated to eliminate such attacks before being allowed to resume driving.

- 13. COMMERCIAL INTRASTATE DRIVERS:** Health care professionals should refer to "Special Qualifications for persons with Diabetes Mellitus" in this manual for information regarding special qualifications for Commercial Intrastate Driver Licensing.

SPECIAL QUALIFICATIONS FOR PERSONS WITH DIABETES MELLITUS FOR COMMERCIAL INTRASTATE DRIVER LICENSES

Some insulin taking diabetic individuals are clearly at minimal risk of severe hypoglycemia. These individuals are characterized by the following:

1. Easy recognition of hypoglycemic spells;
2. Willingness and ability to self monitor blood glucose on a frequent basis;
3. Trained in the management of their diabetes with an understanding of the balance of insulin, food, exercise and stress.

Individuals applying for a commercial intrastate license must meet the following qualifications:

1. Has within the last five years:
 - a. An absence of a hypoglycemic reaction that resulted in loss of consciousness or seizure;
 - b. An absence of seizure or coma without antecedent prodromal symptoms of hypoglycemia;
 - c. An absence of recurrent diabetic ketoacidosis or hyperosmolar nonketotic coma.
2. Provides the following information (as a minimum) to the endocrinologist or internist who examines them:
 - a. A complete medical history including all hospitalization, consultation notes, diagnostic examinations, special

studies and follow-up reports;

- b. A complete driver's record as reported by the state licensing agency which issued the person a driver license (as may be available);
 - c. Complete information regarding any motor vehicle or other accidents resulting in personal injury or property damage;
 - d. Written, signed authorization to permit the examining endocrinologist or internist to obtain information from employers, work associates, health care professionals, or other health care workers, relevant to the person's medical condition.
3. Undergoes a complete medical evaluation by an endocrinologist or internist who will assess the results of the following procedures prior to determining whether the person is qualified to operate a commercial motor vehicle:
- a. At least two results of glycolysated hemoglobin tests during the last 6 months, a lipid profile, urinalysis and CBC.
 - b. Ophthalmologic confirmation of absence of visually significant retinal disease.
 - c. Examination and tests to detect peripheral neuropathy and/or circulatory deficiencies of the extremities.
 - d. A detailed evaluation of insulin dosages and types, diet utilized for control and any significant lifestyle factors, such as smoking, alcohol use and other medications or drugs taken.

The endocrinologist or internist shall:

1. Certify that drivers have been educated in diabetes and its control and thoroughly informed of, and have demonstrated the understanding of, the procedures which must be followed to monitor and manage their diabetes and what actions should be followed if complications arise;
2. Ascertain that drivers have the ability, willingness, and equipment to properly monitor and manage their diabetes. A blood glucose monitor with electronic "memory" is required;
3. Determine that having diabetes will not adversely affect their ability to safely operate a commercial motor vehicle. The methods of making that determination shall be established by the examining health care professional.

The following monitoring and re-evaluation procedures shall be performed, as a minimum, by an insulin-using diabetic who drives a commercial motor vehicle. These procedures may be supplemented with additional procedures and/or operational conditions by the examining health care professional:

1. One hour prior to driving and approximately every two hours while driving, drivers shall test their blood glucose concentration and record those concentrations electronically;
2. Upon request, make records of self blood glucose concentrations available to Federal or State enforcement personnel;

3. Annually, or more often as indicated by the endocrinologist or internist, submit a complete medical re-evaluation including readings of glycosylated hemoglobin to the examining endocrinologist. This requires the driver to submit any new data on the driver's medical condition, driving record or accident involvement and the glucose records. Use of a new examining health care professional will require the insulin-using driver to follow the procedures set forth for a new applicant;
4. At each visit the endocrinologist or internist will verify that the insulin-using diabetic can demonstrate the accuracy of self blood glucose measurement within 20% of actual concentration;
5. Annually have ophthalmologic confirmation of the absence of visually significant retinal disease;
6. While driving, should circumstances preclude a particular blood glucose test, intake of an appropriate snack or other source of glucose is an acceptable alternative; however, no two consecutive tests may be replaced by the ingestion of glucose or food;
7. The driver must carry necessary supplies on board the vehicle including as a minimum, blood sampling lancets, personal blood glucose monitor and strips, a plentiful source of rapidly absorbable glucose. All dated materials must be within their expiration dates;
8. It is suggested that for long distance trips a co-driver or a companion shall be made aware of the signs and symptoms of hypoglycemia and the appropriate treatment thereof

CATEGORY A: DIABETES MELLITUS AND OTHER METABOLIC CONDITIONS

PRIVATE

Safety Assessment Level	Diabetes Mellitus	Medical Report Required	Interval for Review	License Class and Restrictions
1	No history of diabetes mellitus or elevated blood sugar. If history of elevated blood sugar, no positive diagnosis of diabetes	No	N/A	Private vehicles
2	Any diabetes stable with diet and/or non-insulin stimulating medication or has normal blood sugars because of a pancreas transplant	No	N/A	Private vehicles
3	Stabilized diabetes with insulin stimulating medication and no episodes of ketosis or altered consciousness for greater than one (1) year	No	N/A	Private vehicles
4	Stabilized diabetes with insulin with no episodes of ketosis, severe hypoglycemia, or altered consciousness for one (1) year	Yes	1 year ^a	Private vehicles
5	Stabilized diabetes with no episodes of ketosis, severe hypoglycemia, or altered consciousness for six (6) months, but less than one (1) year	Yes	1 year	Private vehicles
6	Stabilized diabetes with no episodes of ketosis, severe hypoglycemia, or altered consciousness for three (3) months, but less than six (6) months	Yes	6 months	Private vehicles, with health care professional recommendation
7	Special circumstances not listed above or under evaluation	Yes	6 months	Private vehicles; special restrictions as recommended by health care professional
8	Severe unstable insulin using diabetes or persisting ketosis	Yes	N/A	No driving

^a Or as recommended by health care professional, longer or shorter interval according to stability, up to a maximum period of 5 years

CATEGORY A: DIABETES MELLITUS AND OTHER METABOLIC CONDITIONS

COMMERCIAL

Safety Assessment Level	Diabetes Mellitus	Medical Report Required	Interval for Review	License Class and Restrictions
1	No history of diabetes mellitus or elevated blood sugar, or a history of elevated blood sugar, but no positive diagnosis of diabetes	No	N/A	Commercial Unlimited
2	Any diabetes stable with diet and/or non-insulin stimulating medication or has normal blood sugars because of a pancreas transplant	Yes	1 year ^a	Commercial Unlimited
3	Diabetes stable on insulin stimulating medication and/or diet (no minimum time required)	Yes	1 year ^a	Commercial Unlimited
4	Stabilized diabetes with insulin , with no episodes of ketosis or altered consciousness, for one (1) year. Requirement for review and approval of <u>downloaded glucose monitor data</u> per Appendix III	Yes	1 year ^a	Commercial Intrastate
5	Stabilized diabetes with no episodes of ketosis or altered consciousness for six (6) months or less than one (1) year. Requirement for review or approval and <u>downloaded glucose monitor data</u> per Appendix III only if on insulin.	Yes	1 year ^a	Commercial Intrastate
6	Stabilized diabetes with no episodes of ketosis or altered consciousness for three (3) months or less than six (6) months. Requirement for review and approval of <u>downloaded glucose monitor data</u> per Appendix III only if on insulin.	Yes	6 months ^a	Commercial Intrastate
7	Special circumstances not listed above, or under evaluation	Yes	6 months ^a	Special restrictions as recommended by health care professional
8	Severe unstable insulin-dependent diabetes or persisting ketosis	Yes	N/A	No driving

^a Or as recommended by health care professional, longer or shorter interval according to stability